



Montana Fish, Wildlife & Parks

September 14, 1999

1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
 Fisheries Division
 Endangered Species Coordinator
 Nongame Coordinator
 Missoula Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
North Powell Conservation District
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Big Blackfoot Chapter Trout Unlimited, Lubrecht Forest Box 1, Greenough, MT 59836

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a Future Fisheries Project tentatively planned to enhance habitat diversity on approximately 3,000 feet of Pearson Creek with the addition of large woody debris. This proposed project is located approximately 5 miles southwest of the town of Ovando in Powell County.

Please submit any comments that you have by 5 P.M., October 15, 1999 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of this project is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Pearson Creek Habitat Restoration Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. This project is being proposed to create greater habitat diversity for fluvial westslope cutthroat trout in Pearson Creek by installing log vanes, weirs and sills; deflector logs; and rootwads in a manner that is consistent with the characteristics of the stream channel. In conjunction with the proposed in-stream habitat work, the landowners who recently acquired the property are addressing the previous poor management of the riparian corridor. The project site, involving a single property, is located approximately 5 miles southwest of the town of Ovando in Powell County (Attachment 1).

I. Location of Project: This project will be conducted on Pearson Creek located approximately 5 miles southwest of the town of Ovando within Townships 14 and 15 North, Range 13 West, Sections 34 (T15N) and 3 (T14N) in Powell County.

II. Need for the Project: Department Goal C indicates that a Fisheries Division objective is to "provide and support programs to conserve and enhance high quality aquatic habitat and protect native aquatic species." The Future Fisheries Improvement Program is a tool to help achieve that objective.

Pearson Creek has been degraded by past stream-side management practices, including overgrazing by livestock and the clearing of riparian timber. However, the new owners of the property are addressing these past problems by entering into a conservation easement and by implementing a rotational livestock grazing system that includes riparian fencing and the development of off-stream water. Past riparian degradation has resulted in the loss of woody debris recruitment into the active stream channel. This lack of woody debris has resulted in a simplification of aquatic habitat, with reduced pool habitat and overhead cover. The project calls for the addition of instream woody debris into Pearson Creek and the planting of riparian shrubs once the necessary changes in riparian management have been implemented.

III. Scope of the Project:

Once riparian management changes have been implemented, the proposal calls for increasing habitat diversity on approximately 3,000 feet of stream channel by installing woody debris in a manner consistent with methodologies associated with a Rosgen B4 channel type. The addition of large woody debris would involve the installation of rootwads and associated deflector logs and the placement of log spur vanes to create lateral scour pools. Log weirs and sills would be placed in the stream channel to create plunge pools. The placement of woody debris structures

would occur approximately every 4 bankfull stream widths or an average of one structure for every 48 feet of channel. A total of 60 to 65 habitat structures would be installed. Changes in riparian management would include the development of a rotational livestock grazing system that incorporates riparian fencing and the development of off-stream water. The project is expected to cost \$17,000.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$5,000.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

The addition of large woody debris into Pearson Creek would create greater habitat diversity for native westslope cutthroat trout. Consequently, the environmental requirements for all life stages of westslope cutthroat trout would be improved.

2. Water quantity, quality and distribution.

Short term increases in turbidity will occur during project construction. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota. A 310 permit will be obtained from the local Conservation District.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed by the installation of woody debris structures, but would stabilize quickly with the re-establishment of vegetation. Overall, the project is expected to reduce bank erosion and improve the riparian vegetative community.

4. Vegetation cover, quantity and quality.

Some riparian vegetation would be disturbed as a result of the installation of woody debris. This disturbed vegetation would be expected to recover very quickly, especially since the riparian corridor will be closely managed as part of a rotational grazing system. Additionally, the proposal calls for the planting of woody shrubs within the riparian corridor to aid in the recovery of the vegetative community.

5. Aesthetics.

Aesthetics would be enhanced by diversifying the existing over-widened and shallow stream channel and by restoring the riparian vegetative community. "Soft" techniques incorporating natural materials would be used to increase the presence of large woody debris in approximately 3,000 feet of stream channel.

7. Unique, endangered, fragile, or limited environmental resources.

Pearson Creek supports fluvial westslope cutthroat trout. The westslope cutthroat trout is a candidate for listing under the Endangered Species Act. The proposal calls for enhancing the diversity of the aquatic habitat utilizing large woody debris and restoring the riparian corridor with changes in management and the planting of woody shrubs. This activity is expected to improve aquatic habitat for all life stages of westslope cutthroat trout.

9. Historic and archaeological sites

The proposed project will likely require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office has been contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

It is anticipated that the enhancement of 3,000 feet of Pearson Creek would improve overall aquatic habitat and, as a result, would enhance westslope cutthroat trout populations residing in the stream. Migrant trout populations from the main stem of the Blackfoot River also would be expected to be enhanced. Consequently, improved recruitment to the Blackfoot River would be expected to improve the recreational fishery in the river. Public access to Pearson Creek is restricted.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this segment of Pearson Creek will continue to provide low quality, homogenous habitat for aquatic life. As a result, densities of westslope cutthroat trout will remain low. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

2. The Proposed Alternative

The proposed alternative is designed to add habitat diversity to the stream channel by installing large woody debris in the form of rootwads, log spurs, weirs and sills. This

increase in habitat diversity, especially increases in pool and cover habitat, would improve recruitment and survival of native westslope cutthroat trout to the Blackfoot River. Proposed changes in riparian management and the planting of woody shrubs within the riparian corridor would improve the stream side vegetative community. This alternative would improve fish and wildlife habitat, aesthetics and water quality within the project area and would be expected to increase trout populations in both Pearson Creek and the main stem of the Blackfoot River.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on the Montana Electronic Bulletin Board.

3. Duration of comment period?

Public comment will be accepted through 5 P.M. on October 15, 1999.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620

Telephone: (406) 444-2432

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Pearson Creek Habitat Restoration Project

Division/Bureau Fisheries Division -Future Fisheries Improvement

Description of Project The project is being proposed to create greater habitat diversity for fluvial westslope cutthroat trout in Pearson Creek by installing log vanes, weirs and sills; deflector logs; and rootwads in a manner that is consistent with the characteristics of the stream channel. In conjunction with the in-stream habitat work, the landowners who recently acquired the property are addressing the previous poor management of the riparian corridor. The project site, involving a single property, is located approximately 5 miles southwest of the town of Ovando in Powell County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats		X				X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction North Powell Conservation District, NRCS, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

Individuals or groups contributing to this EA Big Blackfoot Chapter of
Trout Unlimited; Ron Pierce, Montana Fish, Wildlife and Parks
Recommendation concerning preparation of EIS No EIS required.
EA prepared by : Mark Lere
Date: September 14, 1999

47°
07' 30"

T.16 N.

12

T.15 N.

47°
00' 00"

13

T.14 N.

R. 13 W.

R. 12 W.

FOREST SERVICE MAP
Compiled and constructed in the Regional Office
in 1976 from U.S. Forest Service planimetric and
Geological Survey topographic maps by photoreduction.
Revised in 1987 by the U.S. Forest Service, Geographic
Center, Salt Lake City, Utah from 1985 field reconnaissance
Region. Land ownership supplied by cooperation.

ATTACHMENT 1

113°07'30"

A 1

C

